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09/680,007	10/05/2000	Phillip M. Braun	00216/447001	8518

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EXAMINER

BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 07/10/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,007

Applicant(s)

BRAUN ET AL.

Examiner

Shay L Balsis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-35,38-44,49 and 51-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-35,38-44,49 and 51-65 is/are rejected.
- 7) ☒ Claim(s) 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 6/6/03 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Applicant did not provide a copy of US patent 2771624, 5765249 and EP patent 0520985. The examiner has accessed the US patents and has considered them as indicated on the PTO-892. The EP patent could not be accessed and therefore is not considered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the supporting structure comprising a sleeve must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-2, 4-7, 11-13, 16, 18, 20-26, 29, 33-34 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Trattner et al. (USPN 2066241).

Trattner et al. discloses an oral device comprising an elongate handle (6), a head (5), extending from the handle, having a pair of elongate arms (9) that include opposed surfaces with a predetermined depth. Plurality of pairs of opposed brush head cleaning elements (10) are located on the opposed surfaces at predetermined intervals, and are positioned to clean interproximal surfaces of a user's teeth. Each cleaning element is positioned at an acute angle with respect to an interproximal line (see figure 1). The cleaning elements all extend at substantially the same angle as the other cleaning elements on the same opposed surface (see figure 2). The cleaning elements are positioned so that they flex towards the opposed arms during movement out of the users mouth and they are substantially perpendicular to the opposed surfaces when the oral device is moved into the mouth. The opposed cleaning elements of each pair of cleaning elements define a v-shape (figure 2). There are centering elements (12), which allow the brush to be positioned correctly around the teeth, while also obviate injury to the gums. The handle includes a gripping portion (6) that is to be grasped by the users thumb and fingers. In use, the user holds the handle in their hand and inserting the head portion into their mouth. The head portion comprises the elongate arms and cleaning elements. The cleaning elements are positioned so that they straddle a row of teeth. The user then moves the head of the oral device towards the back of the mouth and then pulls the device to the front of the mouth, repetitively.

5. Claims 35, 38-43, 49 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Hegemann (USPN 5305491).

Hegemann discloses an oral device comprising an elongate handle (10), a head, extending from the handle, having a pair of elongate arms (14, 16) that include opposed surfaces with a predetermined depth. Plurality of pairs of opposed brush head cleaning elements (17, 18) are located on the opposed surfaces at predetermined intervals, and are positioned to clean interproximal surfaces of a user's teeth. Each cleaning element is positioned at an acute angle with respect to an interproximal line (see figure 3c). The angle, known as the "angle of attack" or beta, is optimally 45 degrees when alpha is 27 degrees (col. 5, lines 43-69, col. 5, lines 1-2). However, alpha could be between 15 and 40 degrees so as alpha gets closer to 15, then beta is smaller too. The cleaning elements all extend at substantially the same angle as the other cleaning elements on the same opposed surface (see figure 3a-d). The cleaning elements are positioned so that they flex towards the opposed arms during movement out of the users mouth and they are substantially perpendicular to the opposed surfaces when the oral device is moved into the mouth. The opposed cleaning elements of each pair of cleaning elements define a v-shape (see figure 3a-d). The handle includes a gripping portion that is to be grasped by the users thumb and fingers. In use, the user holds the handle in their hand and inserting the head portion into their mouth. The head portion comprises the elongate arms and cleaning elements. The cleaning elements are positioned so that they straddle a row of teeth. The user then moves the head of the oral device towards the back of the mouth and then pulls the device to the front of the mouth, repetitively.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Hegemann (USPN 5305491).

Trattner et al. teaches all the essential elements of the claimed invention however, the reference fails to teach that the angle is greater than 10 degrees and more preferably between 15 and 40 degrees. Hegemann teaches that the bristles on the side brush heads form an angle between 15 and 40 degrees (col. 3, lines 11-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the angle range as specified in Hegemann on Trattner's toothbrush to permit the side bristles to enter and clean the sulcular pocket.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Okin (USPN 4679273).

Trattner et al. teaches all the essential elements of the claimed invention however, the reference fails to teach a brush head wherein the cleaning elements are 2-20% shorter than the

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cleaning elements of an adjacent pair as the pairs are spaced further from the handle. Okin teaches a toothbrush with a handle comprising a handle and a brush head. The brush head comprising bristles angled away from the handle portion. Okin also teaches that the bristles closest to the handle have a maximum height of 12 mm while the bristles farthest from the handle have a maximum height of 9 mm (col. 6, lines 44-47). Overall that is about a 20% decrease in height, which means that the adjacent pairs would most definitely fall within the range of 2-20% difference. Trattner and Okin are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to modify the cleaning elements of Trattner's invention with Okin's tapering cleaning elements. The motivation for doing so would have been to further aid in reaching into the vestibular regions toward the back of the oral cavity with the attendant space limitations (col. 6, lines 36-44). Therefore it would have been obvious to combine Trattner with Okin to obtain the invention as specified in claims 14 and 15.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Watanabe et al. (USPN 6065176).

Trattner et al. teaches the essential elements of the claimed invention however the reference is silent about the depth (width) of the elongate arms. Watanabe et al. discloses a toothbrush with a head having width of 11.3 mm (col. 5, line 21, figure 6b). Trattner et al. and Watanabe et al. are analogous art because they are from the same field of endeavor of toothbrushes. Though it is not stated in Trattner what the depth (width) is of the elongate arms, it is obvious that it needs to be within the range of 5-15 mm. If it is smaller than 5 mm it will not provide sufficient cleaning in an adult mouth. If it is larger than 15 mm it would be difficult

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clean all the back teeth since it is such a small cavity. At the time of the invention, it would have been obvious to one skilled in the art to modify the depth of the elongate arms on Trattner's invention with Watanabe's depth since his depth falls within the 5-15 mm range, which is an appropriate size for an adult mouth. Therefore it would have been obvious to combine Watanabe with Trattner to obtain the invention as specified in claim 17.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of O'Halloran (USPN 4454623).

Trattner et al. teaches the essential elements of the claimed invention however, the reference fails teach a handle with a disc-shaped gripping portion. O'Halloran teaches a toothbrush with a handle comprising an elongated shaft (24) and a disc-shaped gripping portion (12, 14). The head of the toothbrush is attached to one end of the shaft and the gripping portion is attached at the other end of the shaft. Trattner and O'Halloran are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to replace the handle portion of Trattner's invention with O'Halloran handle portion. The motivation for doing so would have been to create an inherently stable brush that would enable the user to resist unwanted rotation and to delicately control the brush while gripping it only lightly. The delicate light touch with which the brush can be effectively manipulated and the large palm, finger and thumb rest surfaces contribute to the pleasure and comfort of the user and tend to promote a more positive attitude toward brushing (col. 4, lines 42-52).

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Kramer (USPN 6185779).

Trattner et al. teaches the essential elements of the claimed invention however the reference is silent about the distance between adjacent pairs of cleaning elements. Kramer discloses a toothbrush with a head comprising bristles spaced more than .55 mm apart (col. 7, lines 49-51). Trattner and Kramer are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to space the bristles 0.5-6.0 mm apart because Applicant has not disclosed that spacing the bristles 0.5-6.0 mm apart provides an advantage, is used for a particular purpose, or solves a stated problem. Therefore, it would have been obvious to one of ordinary skill in the art to combine Trattner's invention with Kramer's spacing to obtain the invention as specified in claim 28.

12. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Kweon (USPN 6067684).

Trattner et al. teaches the essential elements of the claimed invention however the reference is silent about using elastomeric fins as cleaning elements. Kweon discloses a toothbrush with a head comprising silicon rubber bristles (abstract). Trattner and Kweon are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Kweon's rubber bristles in place of Trattner's bristles. The motivation for doing so would have been that the rubber bristles are soft and have both a high polishing power and a high water repellency, thus effectively cleaning teeth without injuring one's teeth or gums (abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine Trattner's invention with Kweon's bristles to obtain the invention as specified in claim 30.

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13. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) in view of Volpenhein (USPN 6178583).

Trattner et al. teaches the essential elements of the claimed invention however the reference fails to teach longer thinner bristles on the inside of the cleaning elements and shorter thicker bristles on the outside. Volpenhein discloses a toothbrush with bristles for interproximal cleaning. There are a few longer bristles for interproximal cleaning (132) surrounded by many shorter bristles (120) for surface cleaning. Trattner et al. and Volpenhein are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to modify the cleaning elements of Trattner et al. invention with Volpenhein's interproximal cleaning bristles. The motivation for doing so would have been to provide superior cleaning as well as gum and inter dental stimulation (abstract). Therefore it would have been obvious to combine Trattner et al. with Volpenhein to obtain the invention as specified in claim 31.

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trattner et al. (USPN 2066241) view of Shipp (USPN 5930860).

Trattner et al. all teach the essential elements of the claimed invention however the reference is silent about the bristle diameter. Shipp discloses a toothbrush with a head comprising bristles with a diameter of 0.005-0.006 inches (col. 4, lines 4-9) that taper 5-8 degrees when moving away from the handle. The references are all analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to use Shipp's bristles in place of Trattner's bristles. The motivation for doing so would have been to allow the bristle the bend easily and cause the bristles to be gentle on the

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gums (col. 4, lines 4-9). Therefore, it would have been obvious to one of ordinary skill in the art to combine Trattner's invention with Shipp's bristle diameter to obtain the invention as specified in claim 32.

15. Claims 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Trattner et al. (USPN 2066241).

Hegemann teaches all the essential elements of the claimed invention however, the reference fails to teach centering elements. Trattner et al. teaches centering elements (12), which allow the brush to be positioned correctly around the teeth. The centering elements are formed from a resilient material such as rubber and are mounted perpendicular to front and back surfaces of the user's teeth. It would have been obvious to one of ordinary skill in the art at the time of the invention to use centering means to obviate injury to the gums (page 2, col. 1, lines 11-25).

16. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Kramer (USPN 6185779).

Hegemann teaches the essential elements of the claimed invention however the reference is silent about the distance between adjacent pairs of cleaning elements. Kramer discloses a toothbrush with a head comprising bristles spaced more than .55 mm apart (col. 7, lines 49-51). Hegemann and Kramer are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to space the bristles 0.5-6.0 mm apart because Applicant has not disclosed that spacing the bristles 0.5-6.0 mm apart provides an advantage, is used for a particular purpose, or solves a stated problem. Therefore, it would have been obvious to one of ordinary skill in the art to combine Hegemann's invention with Kramer's spacing to obtain the invention as specified in claim 56.

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17. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Kweon (USPN 6067684).

Hegemann teaches the essential elements of the claimed invention however the reference is silent about using elastomeric fins as cleaning elements. Kweon discloses a toothbrush with a head comprising silicon rubber bristles (abstract). Hegemann and Kweon are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Kweon's rubber bristles in place of Hegemann's bristles. The motivation for doing so would have been that the rubber bristles are soft and have both a high polishing power and a high water repellency, thus effectively cleaning teeth without injuring one's teeth or gums (abstract). Therefore, it would have been obvious to one of ordinary skill in the art to combine Hegemann's invention with Kweon's bristles to obtain the invention as specified in claim 58.

18. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Volpenhein (USPN 6178583).

Hegemann teaches the essential elements of the claimed invention however the reference fails to teach longer thinner bristles on the inside of the cleaning elements and shorter thicker bristles on the outside. Volpenhein discloses a toothbrush with bristles for interproximal cleaning. There are a few longer bristles for interproximal cleaning (132) surrounded by many shorter bristles (120) for surface cleaning. Hegemann and Volpenhein are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to modify the cleaning elements of Hegemann's invention with Volpenhein's interproximal cleaning bristles. The motivation for doing so would

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have been to provide superior cleaning as well as gum and inter dental stimulation (abstract).

Therefore it would have been obvious to combine Hegemann with Volpenhein to obtain the invention as specified in claim 59.

19. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) view of Shipp (USPN 5930860).

Hegemann teaches the essential elements of the claimed invention however the reference is silent about the bristle diameter. Shipp discloses a toothbrush with a head comprising bristles with a diameter of 0.005-0.006 inches (col. 4, lines 4-9) that taper 5-8 degrees when moving away from the handle. The references are all analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to use Shipp's bristles in place of Hegemann's bristles. The motivation for doing so would have been to allow the bristle to bend easily and cause the bristles to be gentle on the gums (col. 4, lines 4-9). Therefore, it would have been obvious to one of ordinary skill in the art to combine Hegemann's invention with Shipp's bristle diameter to obtain the invention as specified in claim 60.

20. Claims 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Volpenhein (USPN 6178583) and Trattner et al. (2066241) in view of Volpenhein (USPN 6178583).

Hegemann and Trattner et al. teach the essential elements of the claimed invention however they fail to teach longer thinner bristles on the inside of the cleaning elements and shorter thicker bristles on the outside. Volpenhein discloses a toothbrush with bristles for interproximal cleaning. There are a few longer bristles for interproximal cleaning (132)

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surrounded by many shorter bristles (120) for surface cleaning. The references are analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to one skilled in the art to modify the cleaning elements of Hegemann and Trattner's invention with Volpenhein's interproximal cleaning bristles. The motivation for doing so would have been to provide superior cleaning as well as gum and inter dental stimulation (abstract). Therefore it would have been obvious to combine Hegemann and Trattner with Volpenhein to obtain the invention as specified in claims 61 and 62.

21. Claims 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (USPN 5305491) in view of Shipp (USPN 5930860) and Trattner et al. (2066241) in view of Shipp (USPN 5930860).

Hegemann and Trattner et al. teach the essential elements of the claimed invention however the references are silent about the bristle diameter. Shipp discloses a toothbrush with a head comprising bristles with a diameter of 0.005-0.006 inches (col. 4, lines 4-9) that taper 5-8 degrees when moving away from the handle. The references are all analogous art because they are from the same field of endeavor of toothbrushes. At the time of the invention, it would have been obvious to use Shipp's bristles in place of Hegemann and Trattner et al's bristles. The motivation for doing so would have been to allow the bristle the bend easily and cause the bristles to be gentle on the gums (col. 4, lines 4-9). Therefore, it would have been obvious to one of ordinary skill in the art to combine Hegemann and Trattner et al's invention with Shipp's bristle diameter to obtain the invention as specified in claims 64-65.

Applicant's Arguments

22.

- a. With regard to claim 1, none of the references cited teach or suggest an oral device having centering elements as claimed.
- b. With regard to claim 35, none of the references cited teach cleaning elements that are positioned and dimensioned to provide flexing and straightening motion.
- c. With regard to claim 49, none of the references cited teach the method of cleaning as claimed.

Response to Arguments

23.

- a. The rejections made previously with regards to Northemann et al., Barman and Hegemann, have been withdrawn based on the amended claim however, a new rejection has been made based on the Applicant's IDS.
- b. Hegemann teaches placing the toothbrush over the teeth and ratcheting the brush back and forth. The bristles will be flexed toward a distal end of the handle when pushed and will temporarily straighten out perpendicularly when pulled. There is a point when the brush is being pulled that the bristles will straighten out. Once that point has been passed the bristles will then flex toward the proximal end.
- c. It is obvious that Trattner and Hegemann's toothbrushes are to be used by positioning the device over the teeth and pushing and pulling the brush back and forth to clean the interproximal areas. It is clearly shown in figure 4 of Trattner et al. and figure 13 of

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Hegemann that the brush straddles the teeth. The only movement that the brush could make would be a back and forth motion by pushing and pulling the toothbrush in and out of the mouth.

Conclusion

24. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 6/6/03 incorporating the reference Trattner et al. which prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 703-305-7275. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.

slb
July 2, 2003


Terrence H. Till
Primary Examiner